

STATEMENT OF WORK

Replace Pumps and Reconfigure Valves

UHHZ 060005

20 January 2009

1. SCOPE OF WORK:

The objective of this project is to replace the sludge pumps, piping, valves, and other associated equipment that conveys sludge to the IMCO Filter Press in Building 352. The contractor shall provide all labor, materials, coordination, and supervision to remove all old equipment and install new pneumatic pumps, electronic actuators, pipes, and other supporting materials.

1.1 Period of Performance: 120 days

2. SPECIFIC TASKS:

2.1 Demolish the existing:

2.1.1 (2) 6"x6"x6" Tees on the influent line

2.1.2 Approximately 20' of 6" steel pipes and pipe supports

2.1.3 (2) Screw pump and pump base mounts

2.1.4 (2) 6" to 4" reducers

2.1.5 (2) Sludge blow-off assembly with supports

2.1.6 (2) Pressure gauges

2.1.7 (2) 4" Butterfly Valves

2.1.8 (2) ¾" Sludge pressure relief return lines that run from the 6" lines connecting to the pump inlets on either side to the 4" pipe located just after the sludge blow-off assemblies.

2.1.9 Approximately 21' of 6" steel pipes and fittings

2.2 Demo the return sludge line from fittings that connect it to the return effluent line to the tie in location on the 6" line influent line near the 6" valves. Place inline flanges on remaining ends as not to disturb flow or allow any flow to escape the system.

2.3 Demo three (3) designated pneumatic actuators that are located on the wall outside of the press room. All air lines will be removed and the remaining three (3) pneumatic actuators will be removed as they will be replaced with full electronic actuators. All wires and conduit, both air and power, not associated with the new actuators shall be removed. After removing the actuator on the pre-coat line, place inline flanges on either end on the exposed pipe in order to keep the sludge from the pipe feeding the press from escaping the system and properly seal the unused pipe.

- 2.4 The 2" galvanized waterline shall be removed along with the actuator and any wires or conduit that connect this actuator to the existing air or power supply.
- 2.5 Inside the room containing the filter press, the contractor shall remove the 3" pipe connecting the pre-coat tank to the press and any actuators, gauges, or drains on that line and place an inline flange on the opened pipe to contain its contents. All pneumatic actuators and wires or conduits pertaining to those actuators shall be demolished and replaced by electric actuators with all necessary fittings for full operation.
- 2.6 Installation of new materials:
 - 2.6.1 6"x6"x3" Tee to reconnect the 6" line to the transfer pumps and allow a 3" discharge to run perpendicular to the line and parallel to the ground.
 - 2.6.2 Install the Warren Rupp pump model S30 Filter Press skid containing both high and low pressure pneumatic pumps shown in drawing number 450.424.000 or skid containing pumps equivalent to the EH2-M high pressure and the S30 Metallic low pressure Warren Rupp brand pumps. All specifications must be the same.
 - 2.6.3 A water tap shall be installed on the line prior to reaching the pump skid for flushing purposes. A tap shall also be placed on the existing water line along the wall so that line may be used as a water source for flushing the line.
 - 2.6.4 Install all piping, fittings and gaskets, pipe supports, electronic actuators, and various valves necessary for the filter press to mimic the operation of existing presses in the plant.
 - 2.6.5 The installed parts shall be constructed of the same or similar grade material as the original parts.
 - 2.6.6 Once the installation of all components is complete, the system shall be tested for proper operation.
- 2.7 Clean, prepare, and paint all piping in the work area.
- 2.8 The existing dyke shall be demolished 12' from the northern wall all the way past the 90° bend to the western wall. A new dyke shall form a 90° angle with the remaining dyke and run until it makes contact with the

western wall effectively reducing the existing dyke by half of its original area.

- 2.9 The existing PLC hardware shall be reprogrammed to operate similarly to the JWI filter press PLC and operate in RS Logic 500. Please provide 2 digital and 2 hard copies of the PLC Program with text file and 2 days of onsite operator training
- 2.10 Provide 2 digital and 2 hard copies of the O&M or Instruction manuals.
- 2.11 Contractor shall remove all debris from the site and return the site to original condition.
- 2.12 All work performed and all material and equipment furnished under this contract shall be free from defects and shall remain so for a period of at least 1 year from the date of acceptance. The full cost of maintenance, labor and materials required to correct any defects during this one year period shall be included in the submittal bid.
- 2.13 Contractor shall visit to determine the full scope of work prior to submitting their proposal. This site visit will be scheduled by the contracting officer prior to due date of proposals.
- 2.14 The contractor shall prepare and submit a work plan describing the contractors plan to implement the work required in the task order. In addition, the contractor shall prepare and submit any health and safety, sampling and analysis, waste management plan, quality control plan (QCP) for review and approval prior to beginning construction activities.

3. HAZARDS:

- 3.1 Operations involving welding, cutting, brazing, and open flame are carefully controlled at Robins AFB.
 - 3.1.1 Observe caution and provide welding, cutting, brazing, and open flame equipment in accordance with NFPA 51B, OSHA 1926.350 through 1926.354, and AFOSH Standard 91-5.
- 3.2 Debris:
 - 3.2.1 The accumulation of all debris inside the building shall be kept to a minimum during construction and shall be removed daily.

- 3.2.2 Piles of debris awaiting removal outside any facility shall not be placed in fire lanes or within 25 feet of the facility and should be stored if not removed daily.

4. GOVERNMENT RESPONSIBILITIES:

- 4.1 Robins Air Force Base will provide the electricity, water and other utilities to the site.
- 4.2 Civil Engineering will ensure that the sludge and filtrate lines have been drained of all contents.

5. DOWNTIME:

The installation shall be scheduled so as to cause the least amount of downtime to the facility. All parts and equipment shall be approved and onsite before the dewatering plant is taken offline. Required down time shall be submitted by the Project Manager.

6. GOVERNMENT REPRESENTATIVES:

- 6.1 The contractor shall not make any changes to work done under this SOW unless approved by the contracting officer or contracting officer's representative.
- 6.2 The government project manager (PM) and inspector for the contract is (Wilson Jones), 78 CES/CEOS, 478-327-7423.

7. REJECTED WORK:

Rework will be accomplished with no additional cost to the government. Work shall be rescheduled for the next normal workday.

8. EQUIPMENT DAMAGED BY CONTRACTOR:

The contractor shall be responsible for the repair of any equipment he or she breaks in the process of installing the new system. The repairs shall utilize original manufacturer's approved parts and be in compliance with manufacturer's specifications. When the contractor finishes the repair, the equipment shall function within acceptable manufacturer's specifications.

9. CONTRACTOR QUALIFICATIONS:

The contractor shall ensure that all employees performing work under this contract have all applicable licenses and certification to work on the item in question.

10. WORKMANSHIP:

The contractor shall perform all work to conform to the standards of the government listed in paragraph above and manufacturer specifications. New components shall match or exceed existing components in manufacture, quality, and appearance. The contractor shall correct work not meeting these specifications at no additional expense to the government.

11. CLEANUP:

Leave the work area clean and free of all debris, rubbish, and other substances resulting from the work. When the work is completed, the contractor shall reinstall or return site to its original condition.

12. SUBMITTALS AND OPERATION AND MAINTENANCE DOCUMENTS:

Provide two hard copies and two digital copies of the submittals, shop drawings, and operation and maintenance manuals. Package shall include the following:

- 12.1 Project Work Schedule
- 12.2 Product data on all newly installed valves
- 12.3 O&M Manual and PLC program with text file
- 12.4 A sludge path flowchart showing all of the system components and their relative locations.

13. CONTRACTOR PERSONNEL:

- 13.1 Contract Manager. The Contractor shall provide a contract manager who shall be responsible for the performance of the work. The name of this person, and an alternate or alternatives, who shall act for the contractor when the manager is absent, shall be designated in writing to the contracting officer or the contracting officer's representative.
- 13.2 The contractor's contract manager or alternate shall have full authority to act for the contractor on all contract matters relating to daily operation of the contract, including full contractual signatory authority.
- 13.3 The contract manager or alternate shall be available during normal duty hours within tow duty hours to meet on the installation within government personnel (designated by the contracting officer) to discuss problem areas. After normal duty hours, the manager or alternate shall be available prior to 1000 hours the next normal duty day.

14. SECURITY REQUIREMENTS:

- 14.1 The contract employees must complete a "Request for Identification Credential" (AFMC Form 496) for each employee of the contractor requiring access to Robins Air force Base. The requests shall be submitted to Pass and Registration (Building 263). The government will provide a completed "Identification Credential (AFMC Form 387)", which shall be issued, displayed and surrendered as directed in AFI 31-209.

15. PHYSICAL REQUIREMENTS:

The contractor shall be responsible for safeguarding all government property being modified or adjacent to the new work. This shall include the existing water lines and towers. At the close of each work day, all government facilities, equipment, and materials shall be secured.

16. HOURS OF OPERATION:

- 16.1 Normal Hours of Operation on Robins AFB. The contractor shall perform the services required under this contract during the following hours: MON-FRI, 0700-1700, except federal holidays and as noted herein. The contractor shall work, with prior approval of the contracting officer representative, extended hours to ensure timely completion of work at no additional cost to the government.
- 16.2 Holidays. The contractor is not required to provide service on the following days: Independence Day and Labor Day. If the holiday falls on a Saturday, it is observed on Friday. If the holiday falls on Sunday, it is observed on Monday.

17. GOVERNMENT OBSERVATIONS:

Government personnel, other than Contracting Officers (CO) may, from time-to-time, with CO coordination, observe or inspect contractor operations. However, these personnel may not interfere with contractor performance.

18. CONTRACTOR-FURNISHED ITEMS AND SERVICES:

- 18.1 MINIMUM QUALITY STANDARDS: The quality of parts and materials shall not be altered. All parts and materials shall meet industry standards, including, but not limited to, AWWA C500 and AWWA C651.

End of Statement of Work